IN THE CLAIMS

- 1. (currently amended) An ultrasound probe comprising:
- a first chamber;
- a second chamber; and
- a sealing member between the first and second chambers; and, wherein the second chamber includes only a single connection member, the single connection member being only within only the second chamber and having a rigid portion and a flexible portion, the rigid portion forming at least part of the sealing member.
- 2. (original) An ultrasound probe in accordance with claim 1 wherein the sealing member comprises a wall between the first and second chambers.
- 3. (original) An ultrasound probe in accordance with claim 1 wherein the first chamber is a dry chamber and the second chamber is a wet chamber.
- 4. (original) An ultrasound probe in accordance with claim 1 wherein the connection member comprises a printed circuit board.
- 5. (original) An ultrasound probe in accordance with claim 1 wherein the rigid portion comprises a rigid printed circuit board and the flexible portion comprises a flexible printed circuit board.
- 6. (original) An ultrasound probe in accordance with claim 1 wherein the rigid portion is configured to connect to a system cable in the first chamber and the flexible portion is configured to connect to a transducer array in the second chamber.
- 7. (original) An ultrasound probe in accordance with claim 1 wherein the rigid portion is configured to connect to a system cable in the first chamber and the flexible portion is

configured to connect to a transducer array in the second chamber, the transducer array provided as part of a scan head configured to move within the second chamber.

- 8. (original) An ultrasound probe in accordance with claim 1 wherein the rigid portion is integrally formed with the sealing member.
- 9. (original) An ultrasound probe in accordance with claim 1 wherein the rigid portion is sealingly engaged with the sealing member.
- 10. (original) An ultrasound probe in accordance with claim 1 further comprising an interconnection member to connect the rigid portion to a system cable within the first chamber.
- 11. (previously presented) An ultrasound probe in accordance with claim 1 wherein the sealing member comprises at least one opening.
- 12. (original) An ultrasound probe in accordance with claim 1 wherein the first and second chambers are formed in a unitary construction.
- 13. (original) An ultrasound probe in accordance with claim 1 wherein the first and second chambers are formed in a modular construction.
- 14. (original) An ultrasound probe in accordance with claim 1 wherein the ultrasound probe is configured to operate in at least one of a 1D, 1.25D, 1.5D, 1.75D and 2D mode of operation.
 - 15. (original) An ultrasound probe comprising:
- a dry chamber having drive means for mechanically controlling at least one transducer and communication means for electrically controlling the at least one transducer; and
- a wet chamber having a connection member formed of a rigid portion and a flexible portion, the rigid portion forming at least part of a wall between the wet and dry chambers and

configured to connect to the communication means, and the flexible portion configured to connect to the at least one transducer.

- 16. (original) An ultrasound probe in accordance with claim 15 wherein the communication means comprises a system cable.
- 17. (original) An ultrasound probe in accordance with claim 15 wherein the drive means comprises a motor and gear arrangement.
- 18. (original) An ultrasound probe in accordance with claim 15 wherein the connection member further comprises a printed circuit board.
- 19. (original) An ultrasound probe in accordance with claim 15 wherein the dry and wet chambers are configured to connect in a modular arrangement.
- 20. (currently amended) A connection member for an ultrasound probe, the connection member comprising:
- a flexible portion within only a wet chamber configured to connect to at least one transducer; and
- a rigid portion forming at least part of a sealing member between the wet chamber and a dry chamber, the rigid portion configured to connect to a system cable in the dry chamber, the flexible and rigid portions being a single member.
- 21. (original) A connection member in accordance with claim 20 wherein the flexible portion and rigid portion each comprise a printed circuit board.
- 22. (currently amended) A method for controlling an ultrasound probe, the method comprising:

communicating between at least one transducer array and a host system via a connection member, the connection member formed of a rigid portion and a flexible portion that form a single member, the flexible portion being entirely within a wet chamber and configured to connect to the at least one transducer array, the rigid portion forming at least part of a wall between a the wet chamber having the at least one transducer array therein and a dry chamber having a system cable therein, the rigid portion configured to connect to the system cable, with the system cable connected to the host system; and

controlling elements of the at least one transducer array with the communicating.

23. (original) A method in accordance with claim 22 wherein the connection member comprises a printed circuit board.